

presented to the Board. Claim 17 has been modified in order to clarify its subject matter, and it is believed that in this form it makes Claims 17, 18 and 19 allowable over the rejection presented by the Board of Appeals.

Because of the wording selected in Claims 11 and 17, the Board found that there was a lack of disclosed "corresponding structure" for connecting the opening of the vessel to the lumen of an article to deliver antimicrobial vapor to the lumen. It is believed that this is incorrect as to Claim 11, and that Claim 17 has been modified in order to more clearly state the claimed subject matter.

With regard to Claim 11, it can easily be described with reference to Figures 1 or 2, and thus sufficient structure can be found in the specification and drawings. For example, the device shown in Figure 1 is a device for delivering an antimicrobial vapor to the lumen of an article during solution vapor sterilization. The device comprises a vessel which may be the vessel 14 indicated in the specification and shown in Figure 1. Additionally with reference to Figure 2, the vessel is indicated with numeral 34 and again is the containing device.

The difference between Figure 2 and Figure 2A will be described below. The vessel is for containing an antimicrobial solution and has an opening therein. It is easily seen that there is an opening indicated by 24 in Figure 1 and also an opening indicated by 32 in Figure 2. Claim 11 continues by requiring "means for connecting said opening of said vessel to said lumen". It further requires that the vessel be closed to the ambient atmosphere except through the opening, and that the vessel contains a known quantity of antimicrobial solution for vapor formation. It is easily seen that the vessel 14 is open only through the opening 24 and that the vessel 34 is open only through the opening 32. The opening 32 is surrounded by an elastomeric material which attaches the opening to the lumen of the device. The vessel 14 is connected through the expandable sheath 16 in a similar fashion. Thus, there is sufficient structural provision for "means for connecting said opening of said vessel to said lumen". It is clear that the vessel is either the bottle-shaped vessel indicated by numeral 14 in Figure 1, or the tumbler-shaped vessel 34 indicated in Figure 2.

The Board of Appeals appears to be confused by the reference to Figure 2A which is a variation of Figure 2. In

Figure 2A the substrate 42 which contains the antimicrobial solution in Figure 2 has been replaced by an opening that receives a cartridge having a substrate. The cartridge 47 attaches to the bottom of the device. Once the cartridge is attached to the device, the entire device creates the "vessel" of the claims. Thus, the vessel is structurally provided for in Figure 2A as called for in Claim 11. There is further provision that the vessel, which is comprised of the cartridge 47 and the connection portion attached thereto and having the elastomeric rings 38 and 40 contained therein form the vessel. It is interesting to note that the specification specifically notes in Figure 2 that the numeral 34 is the vessel. This reference numeral points to the tumbler-shaped device of Figure 2. However, that reference numeral is not used in Figure 2A to indicate solely the attachment device at the top of the cartridge. Rather the entire device, cartridge and attachment device make up the vessel as called for in the claim. Thus the vessel (through the cartridge) contains a known quantity of antimicrobial solution for vapor formation and also includes "means for connecting said opening of said vessel to said lumen" through the elastomeric rings 38 and 40. Thus, the structural

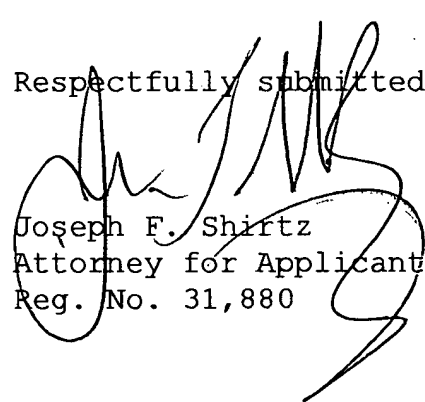
components of the means plus function language in the claims are fully set forth in the specification.

Claim 17 has been modified in order to clarify the use of the word "vessel" which appeared to confuse the members of the Board. It now describes a vessel "including a cartridge" in order to clearly define the fact that the vessel describes the cartridge and attachment mechanism combined in Figure 2A and the unitary devices of Figures 1 and 2 (the vessel 14 or vessel 34 as required). Each of these devices, when viewed as a vessel, is open to ambient atmosphere only through the opening in its end. Each of these devices is connected to a lumen through that opening by an attachment mechanism, either an expandable sheath 16 or elastomeric rings 38 and 40. Thus, the means for connecting said opening of said cartridge to said lumen includes the connecting apparatus attached to the mouth of the cartridge in Figure 2A that contains the elastomeric rings. Furthermore, the means for connecting said opening of said cartridge to said lumen include those elastomeric rings as they connect to the lumen. It is respectfully submitted that the amendment to Claim 17 in clarifying the language to overcome the 35 USC §112 rejection of the Board, the amendment incidentally overcomes the

35 USC §112 rejection of Claim 17 that was affirmed by the Board.

Claim 20, having been deleted, Claim 17 having been properly amended in order to clarify its language, and in view of the arguments presented above, it is respectfully submitted that all the claims of the present application are in condition for allowance. Early notice of allowance is respectfully requested.

Respectfully submitted,



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